

## PATENT ABSTRACTS OF JAPAN

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## (54) DEXTRAN MATRIX POLYMER

## (57)Abstract:

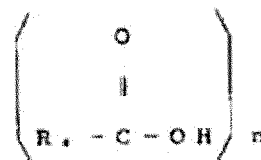
PURPOSE: To obtain the subject polymer useful as a material having affinity for living body such as contact lens by subjecting a cationic derivative of dextran and an unsaturated acid to matrix polymerization.

CONSTITUTION: A cationic derivative of dextran of formula I [X is (CH<sub>2</sub>)<sub>n</sub>R<sub>1</sub> or COR<sub>2</sub> (R<sub>1</sub> is NH<sub>3</sub>, C<sub>6</sub>H<sub>4</sub>-NH<sub>2</sub>, etc.; (n) is 1-3; R<sub>2</sub> is CH<sub>2</sub>, NH<sub>3</sub> or C<sub>6</sub>H<sub>4</sub>-NH<sub>2</sub>), etc.; (a) is 0-3; (x) is 5-50,000] is polymerized with an unsaturated acid having a structure of its polymer of formula II (R<sub>4</sub> is 2-16C organic group containing bond of formula III derived from C=C bond of unsaturated acid; (n) is 20-300,000) (e.g. acrylic acid or crotonic acid) to give the objective polymer of formula IV.

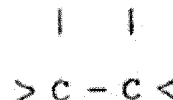
This polymer is preferably obtained by reacting the unsaturated acid with an aqueous solution of the derivative of formula I in the presence of an initiator such as potassium persulfate.



I



II



III



IV